AlphaLISA® *SureFire® Ultra™*

Human and Mouse STAT2 Total Detection Kit

Product number: ALSU-TST2-A500, ALSU-TST2-A10K, ALSU-TST2-A50K, ALSU-TST2-A-HV

Kit specificity:

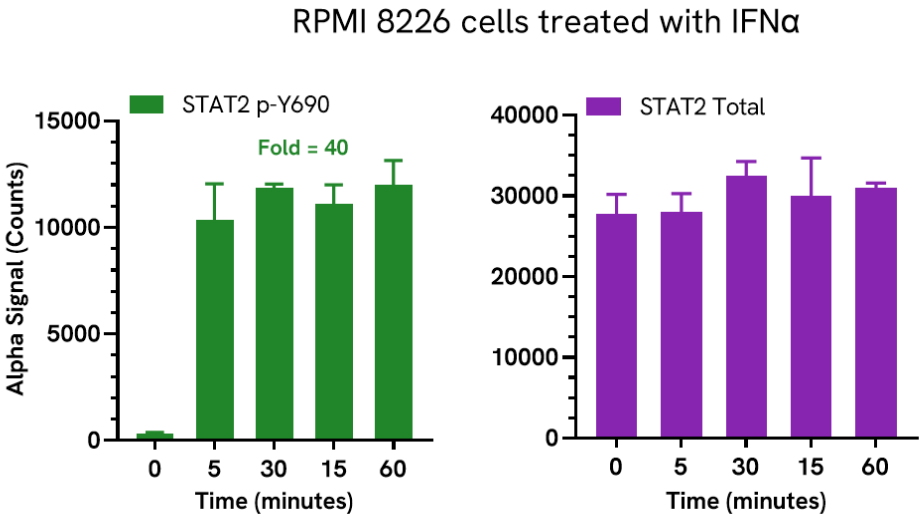
This assay kit contains antibodies which recognize distinct epitopes on STAT2. The protein detected by this kit corresponds to UniProt ID P52630. STAT2 is also known as Signal transducer and activator of transcription 2. These antibodies recognize STAT2 of human and mouse origin. Other species should be tested on a case-by-case basis.

Control lysate information:

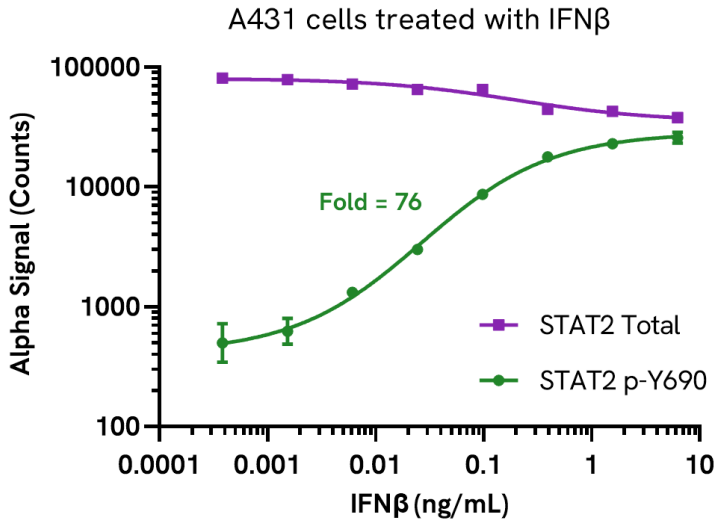
Positive Control Lysate: Prepared from A431 cells, cultured to confluence in T175 flasks in 10% FBS containing medium, then treated with 10 ng/mL recombinant human IFNβ for 30 minutes and lysed with 4 mL of Lysis Buffer.

Representative data:

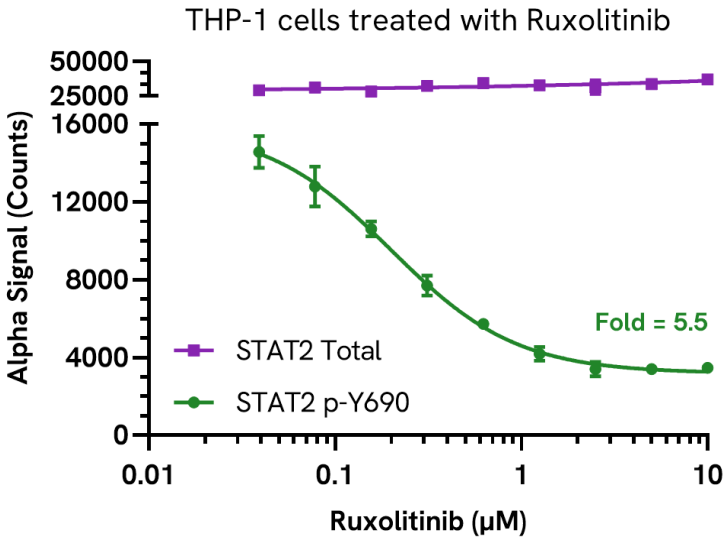
Data obtained with a 2-plate, 2-incubation protocol. RPMI 8226 cells were harvested, seeded in a 96-well plate at 200K cells/well and treated with 10 ng/mL IFNα at the indicated timepoints. Cells were washed, lysed with Lysis Buffer and assayed separately for Phospho (Tyr690) and Total STAT2 using respective *SureFire Ultra* kits. Equivalent to approximately 20,000 cells/datapoint.



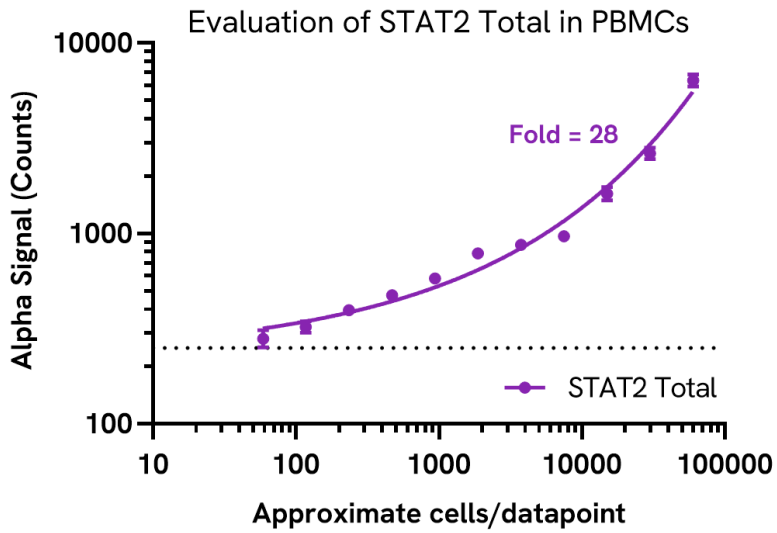
Data obtained with a 2-plate, 2-incubation protocol. A431 cells were seeded at 60K cells/well in a 96-well plate and incubated overnight. Cells were treated with IFNβ at the indicated concentrations for 30 minutes. Cells were lysed with Lysis Buffer and assayed separately for Phospho (Tyr690) and Total STAT2 using respective *SureFire Ultra* kits. Equivalent to approximately 6,000 cells/datapoint.



Data obtained with a 2-plate, 2-incubation protocol. THP-1 cells were seeded at 200K cells/well in a 96-well plate with HBSS containing 10 ng/mL IFN β for 15 minutes. Cells were then treated with the JAK inhibitor, Ruxolitinib at the indicated concentrations for 1 hour. Cells were lysed with Lysis Buffer and assayed separately for Phospho (Tyr690) and Total STAT2 using respective *SureFire Ultra* kits. Equivalent to approximately 20,000 cells/datapoint.



Peripheral Blood Mononuclear Cells (PBMCs) were isolated from healthy donors using Ficoll Plaque Plus (Merck, GE17-1440-02). PBMCs were lysed with Lysis Buffer at 6 x 10^6 cells/mL. Generated lysate was serially diluted in Lysis Buffer and evaluated for STAT2 Total levels using the *SureFire Ultra* kit. Lysate dilution starts with approximately 60,000 cells/datapoint.



Data obtained from measurement of STAT2 in various cell types lysed with Lysis Buffer. Equivalent to approximately 5,000 cells/datapoint (adherent cells) or 16,000 cells/datapoint (suspension cells).